UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

November 6, 1995

Via Facsimile and U.S. Mail

Mr. Thomas Macchiarella
Department of the Navy
Southwest Division
1220 Pacific Highway
San Diego, CA 92132

RE: Review and Comment on Draft Extended Site Inspection, Inactive Landfill, Naval Training Center, San Diego

Dear Mr. Macchiarella:

EPA has completed its review of the Draft Extended Site Inspection (ESI), Inactive Landfill, at Naval Training Center, San Diego (NTC). EPA's comments are summarized below.

Comments on the Draft ESI, Inactive Landfill, NTC

I. GENERAL COMMENTS

1. The information presented in this document does not meet the objective stated in the last paragraph of the introduction. There are multiple data gaps. A major data gap is the lack of information on groundwater and soil beneath the Inactive Landfill. The thickness of fill is only known around the perimeter of the landfill and along the sewer line down the center of the landfill. Fill thickness also influences settlement and gas generation rates.

   According to the Final Work Plan (Section 4.6.3) the base of the artificial fill was identified as a potential migration pathway. The elevation of the base of the landfill will need to be determined to evaluate this migration pathway.

   Seasonal variation in groundwater flow patterns was not determined. Groundwater analytical data does not exist for large portions of the interior of the landfill. Groundwater analytical data for the interior of the landfill would help determine the extent of groundwater contaminant plumes, especially on the north end of the landfill, and the extent of leachate generation.

   Another data gap is the extent of landfill gas (LFG) production. The northern half of the least tern area and the southern half of the Inactive Landfill have not been adequately characterized for LFG.

SECTION 2 - SPECIFIC COMMENTS

1. **Figure 2-1.** Include the location of the study area on the location map.

2. **Section 2.3.2, last paragraph, p. 2-7.** Support is not provided for the conclusion that contamination in groundwater under the proposed drill field site does not require remediation. According to the description of the Recruit Barracks Enlisted Quarters Subsurface Investigation and Figure 2-4 groundwater samples were not collected in the Inactive Landfill area during or prior to the investigation. Please provide additional discussion to support this conclusion.

3. **Section 2.3.5, Paragraph 2, p. 2-11.** Please expand on how the North Metro Interceptor Sewer (NMIS) project report came to the conclusion that "soil and groundwater quality would not be adversely impacted ... if proper safety procedures were followed." The statement implies that the NMIS project would be a source of contamination. Specify the type of safety precautions that would prevent soil and groundwater contamination.

4. **Section 2.3.6, p. 2-11.** The text in the first bullet is ambiguous about the depth of the soil borings and CPT borings. Please clarify.

   The text states that four soil borings and two CPT borings were advanced. However, Figure 2-4 shows the location of only one soil boring (B6) and one CPT (CPT-2, N and M) that were part of Phase II of the NMIS investigation. Add the missing sample locations to Figure 2-4.

5. **Section 2.3.6, Paragraph 2, p. 2-12.** Identify the two monitor wells sampled during Phase II of the NMIS investigation.

SECTION 3, SPECIFIC COMMENTS

1. **Figure 3-1.** If possible, please include a map which shows the topography of the area surrounding the site (the area within 1 to 2 miles of the site should be included). This would help the reader understand whether runoff from nearby areas impacts the site, or whether surface runoff from the site could impact other areas.

2. **Section 3.4, Paragraph 4, p. 3-3.** The description of artificial fill only discusses areas adjacent to the landfill. The report does not include any information on the vertical extent of municipal waste, types of waste observed within the landfill, or the "stratigraphy" of the fill within the landfill zone. A complete description of artificial fill within the landfill zone should include this information.

3. **Section 3.4, p. 3-4.** It is not clear whether the Bay Point Formation consists of rock or unconsolidated sediment. The Bay Point Formation is described in this section as unconsolidated sediment. In the geology section the Bay Point Formation is described as a sandstone (rock). Explain how these sediments were correlated to the Bay Point Formation.

4. **Section 3.5, p. 3-4.** The local and regional hydrogeological setting of the area should be discussed. Identify any current or past uses of groundwater in the area, particularly deep groundwater aquifers. Does the City of San Diego use any deep sources of groundwater in the area for its municipal supply?

   The two groundwater zones present beneath the site are not discussed in this section. Expand the discussion to include information from the field investigation for this report. Include information on the effect of the boat channel and bay on the groundwater hydrology and the differences in groundwater flow direction in the two groundwater zones. Even though a detailed description of the hydrogeology is presented in subsequent sections, this section should at least summarize the present state of knowledge about the hydrogeology of the site.

SECTION 4, GENERAL COMMENT

This section does not discuss the need for information to evaluate the base of the fill beneath the Inactive Landfill as a potential migration pathway. This was listed as a data gap in the Final Work Plan. Another data gap listed in the Final Work Plan but not mentioned in this section is the need to identify monitor wells that should be abandoned. These data gaps should be explained in Section 4.

SECTION 5, SPECIFIC COMMENTS

1. **Table 5-1, p. 5-2.** Add a footnote or text explaining the significance of the Land Survey Report.

2. **Section 5.3, p. 5-2.** The logs in Appendix B indicate that a hand auger was used at the sample locations. However, this paragraph and Appendix C state that a posthole digger was used. Change the text or logs to eliminate this discrepancy.

   The text states that fewer locations than planned were sampled because the 16 locations sampled were sufficient for characterizing the cover soil. However, according to Table 5-1, determining the landfill cover thickness was an objective of the investigation. An examination of the boring logs in Appendix B showed that at most only five of the borings fully penetrated the landfill cap. Furthermore, the statistical validity of the sample location selection methodology described in Appendix C appears questionable since sample locations were dropped in the field. It appears that the

landfill cap was not sufficiently characterized. Please include a brief explanation in the text as to why all of the original, planned sample locations were not sampled.

3. **Section 5.10, p. 5-15.** The section does not explain how the *in situ* groundwater samples were collected from the CPT borings. Describe the equipment and methodology used to collect the *in situ* groundwater samples or reference Appendix C.

4. **Section 5.14, Paragraph 1, p. 5-23.** Add a discussion of the methodology for installing temporary vapor points to Appendix C.

SECTION 6, GENERAL COMMENTS

1. This section does an adequate job of presenting the geology and the results of the analytical sampling. However, no attempt is made to define the extent of contamination. The extent of contamination must be discussed. There appear to be two main areas of organic groundwater contamination, near the boat channel in zone B and west of the Inactive Landfill in zones A and B. However, the extent of contamination in these areas has not been defined. Additional groundwater sampling farther to the west and underneath the Inactive Landfill may be required to adequately define the extent of contamination. At a minimum, these potential data gaps should be discussed in the ESI.

   Zone specific groundwater plume maps or maps with posted data should be produced. Both *in situ* and monitor well groundwater data should be posted on the same map. This will clarify both the extent of groundwater contamination and data gaps.

2. A leachate plume may be present beneath the landfill based on the presence of elevated TDS concentrations in groundwater. There is no discussion of a leachate plume or the origin of the elevated TDS concentrations in the text. This is a data gap in the analysis of groundwater conditions and must be addressed.

3. One of the specific goals of this study was determine groundwater flow direction and gradient. However, there are still some uncertainties with these determinations as presented in the ESI. Additional rounds of water level measurements should clarify flow direction. The vertical and horizontal hydraulic gradients should also be calculated.

4. Section 6.2.4, Background, needs to be revised to clearly lay out the evaluation process and supporting documentation. EPA is particularly concerned that the BCT was not involved in determining background for this site. Background

concentrations are included in the risk assessment calculations and therefore the BCT needs to be in full agreement with the background concentrations for the inactive landfill and NTC overall. Since the primary risk driver for the landfill appears to be the LFG, not the cover soils, background may not be as significant an issue in this case. But, at a minimum, this section of the ESI must be detailed, defensible and agreed upon by the State and EPA.

SECTION 6, SPECIFIC COMMENTS

1. **Section 6.1.2 and Figure 6-1, p. 6-2.** The results of the magnetic survey as presented in Figure 6-1 should match the extent of debris presented in Appendix D figures. The interpreted landfill perimeter in Figures 4b and 4c and Figures 5b and 5c of Appendix D do not match Figure 6-1. Please correct this discrepancy.

2. **Section 6.2.3, Paragraph 1, p. 6-6.** Figure 5-3 does not show the locations of the 17 surface soil samples collected within the cover soil or the 3 samples collected outside the landfill boundary. Provide the correct figure reference for the surface soil sample locations.

3. **Section 6.3.2.1, Paragraph 1, p. 6-21.** Discuss trends in the thickness of fill across the Inactive Landfill. Please provide a fill isopach map or a contour map of the fill/estuarine deposits contact to illustrate how fill thickness varies across the site.

4. **Section 6.3.4, p. 6-25 and Table 6-6, p. 6-37.** Appendix C indicates that the geotechnical analysis of soil cover samples included *in situ* permeability and Atterburg limits. Add the results of these analyses to Table 6-6 or, if the analyses were not performed, remove them from Appendix C.

5. **Figure 6-12.** The hydrostratigraphic section should be reexamined to make sure that monitor well screen intervals and contacts between zones are accurately depicted. Inconsistencies between the boring logs and this figure were noted and need to be corrected.

6. **Section 6.4.3.2, p. 6-43.** Explain how mean water level elevations were calculated from the tidal data. Also, state if there are any other wells in the area from which water level data could be included in future water level studies.

7. **Section 6.4.3.3, Page 6-43.** The inactive landfill site is located in a transitional groundwater flow regime. Groundwater contours maps in transitional areas can be confusing because variations in flow direction can occur in relatively short distances. Regionally, groundwater appears to be discharging to the northwest and west towards the Boat Channel and to the south towards West Basin (San Diego).

Recharge to shallow groundwater comes from surface infiltration and from areas north and east of the site. Recharge to deep groundwater appears to come from shallow groundwater and from the west. The groundwater contour maps should be constructed from the water level data but also be consistent with regional groundwater flow patterns. A discussion of how the local and regional groundwater flow regime influences the landfill site should be included in the text. State the depth of nearby marine water bodies, in particular, the boat channel.

8. **Section 6.4.3.4, p. 6-44.** Vertical gradients can and should be calculated for adjacent well pairs. Use the midpoint screen elevations to calculate vertical gradients. EPA is particularly interested in the calculation of vertical gradients should there be a leachate plume moving downward potentially impacting deeper groundwater sources.

9. **Section 6.4.4, Page 6-44.** This section should also include a discussion of aquifer discharge areas.

10. **Table 6-8, p. 6-47.** The average groundwater elevations in this table are not always consistent with the water level elevations provided in Appendix G. Also, values for Well ES-06D are listed three times. Please explain or correct.

11. **Section 6.5, p. 6-53.** The discussion focusses on why *in situ* inorganic data can not be used for contouring. However, *in situ* data can provide valuable information for contouring organic analytical data. For instance, cis-1,2-DCE and TCE were detected in HP-22 and in several nearby wells. The discussion is misleading and should be reworded.

12. **Section 6.5.2.1, p. 6-54.** It would be useful to evaluate the Ca/Mg and Na/K ratios to assist with identification of the origin of evaluated TDS concentrations (i.e., marine, leachate, or brine?).

13. **Figures 6-18 and 6-19,, pp. 6-67 and 6-69.** Indicate sample locations where none of the analytes posted were detected (i.e., label "ND" locations).

14. **Paragraph 1, p. 6-73.** TDS concentrations of greater than 40,000 mg/L are reported in three wells in Zone B. This is 5,000 to 10,000 mg/L greater than the TDS concentrations typically found in seawater. Explain the process or mechanism by which brine is being formed in Zone A and B. It is unlikely that these elevated TDS levels can be explained by the fact that the area was historically salt marsh as the TDS levels would more than likely be equivalent to sea water not significantly higher. This data suggests that a leachate plume from the landfill exists in Zone A and extends into Zone B and may be discharging to the Boat Channel.

15. **Paragraph 3, p. 6-73.** In addition to the high TDS described above, the distribution of iron and manganese in the groundwater appears to be consistent with the generation of leachate from the landfill. Again, EPA is particularly interested in the possibility of a downward moving leachate plume which may contain contaminants potentially impacting deeper groundwater sources.

16. **Section 6.5.2.3, Paragraph 4, p. 6-74.** The statement that the contamination near the boat channel does not appear to be connected to the landfill is not adequately supported. EPA also has concerns about the possibility of a downward moving leachate plume which may contain contaminants potentially impacting deeper groundwater sources. Two *in situ* samples (HP-22 and HP-12), located between the wells next to the boat channel and the Inactive Landfill also contained TCE and cis-1,2-DCE. No wells are present within the landfill area southeast of the *in situ* sample locations, so the landfill remains a potential source. The possibility that the groundwater contamination in this area is associated with the landfill should be included in this discussion.

17. **Figure 6-20, p. 6-75.** Add a note to the figure indicating the date for the interpreted groundwater flow direction.

    The zone B data should be recontoured without the TDS value for DMW-8. DMW-8 has a filter pack that spans both zones A and B (see Appendix I).

18. **Figure 6-22, p. 6-79.** Several of the zone A sample locations have more than one value. Also several of the values are not posted next to wells. Please correct these discrepancies.

    The zone B data should be recontoured without the iron/manganese ratio for DMW-8. DMW-8 has a filter pack that spans both zones A and B (see Appendix I).

19. **Table 6-14, p. 6-84.** Bold type is not used consistently to denote concentrations exceeding the detection limit. All concentrations exceeding the detection limit should be in bold type or the significance of bold type must be explained.

20. **Figure 6-23, p. 6-85.** Produce figures showing both monitor well and *in situ* results for a single zone. These figures would be much more useful for visualization of the extent of contamination. A symbol or font difference could be used to distinguish between the two data sets with a footnote that emphasizes the difference in data quality (see Section 6 General Comments). Wells and CPT locations where no organic analytes were detected should be labeled ND.

21. **Section 6.5.2.5, Paragraph 1, p. 6-87.** Change the reference from Table 6-17 to Table 6-18.

22. **Section 6.6.1, Paragraph 2, p. 6-92.** LFG-19 and LFG-22 are located south of LFG-15 and LFG-16. Change the location description.

23. **Figure 6-25, p. 6-97.** Add a note to Figure 6-25 that describes the "integrated surface sample".

24. **Section 6.6.2, p. 6-99.** This section states that a "limited area of the fill contains organic waste that is decomposing anaerobically." However, the northern half of the least tern area and most of the southern half of the Inactive Landfill were not sampled for LFG. Change the statement to indicate that other areas of the Inactive Landfill may contain organic waste that is decomposing anaerobically.

SECTION 7 and APPENDIX F, GENERAL COMMENTS

1. The data validation reports lack detail. Exceedances of quality control criteria (calibration response factors, surrogate recovery, matrix spike recovery, etc.) are discussed only in general terms. Specific surrogate compounds, matrix spiked compounds, magnitude of QC criteria exceedances and analytes affected are not presented in validation reports.

2. Water samples and soil/sediment samples with analyte concentrations less than five times the quantitation limit normally do not have relative percent differences calculated and are not considered in the review of comparability of duplicates. Justify using these types of results in the duplicate comparison.

3. Final validated data summary sheets were not included. Because of this omission, reviewers cannot determine if data qualifiers described in validation memoranda were appropriately applied to sample results. Will summary sheets be included in the final ESI?

SECTION 7, SPECIFIC COMMENTS

1. **Table 7-1.** For note "e", µg/L should be described as micrograms per liter.

2. **Section 7.4.1.2, last paragraph and Table 7-3, p. 7-7.** Both tentatively identified compounds (TIC) and target analyte list (TAL) compounds were rejected (R) due to samples concentrations being less than five times the blank concentration. TIC compounds can be either rejected or qualified as undetected (U), but TAL compounds are usually

qualified as undetected (U)[1]. Explain why these samples were qualified as rejected.

3. **Section 7.4.1.3, last paragraph, p. 7-9.** See first specific comment.

4. **Section 7.4.1.4, p. 7-9.** In this section, sample results for tentatively identified compounds that were less than five times the blank concentration were qualified as undetected (U). However, results for rinseate and field blanks were qualified as rejected using the same criteria. Data qualifiers should be applied in a consistent manner. Reconcile this inconsistency.

SECTION 8, COMMENTS ON HUMAN HEALTH RISK ASSESSMENT

EPA previously identified a few issues in the work plan that were not addressed in the draft ESI:

1. **Section 8.2, Page 8-2.** Vinyl chloride (a known human carcinogen) has been detected in landfill gas and this data must be used to evaluate the risk associated with the landfill. Vinyl chloride has such a high vapor pressure that it is to prone to move vertically more than to migrate laterally off of the landfill surface, which may be why it wasn't detected in downwind samples. In general, it is expected that the concentrations of landfill gases would be higher on the surface of the landfill than they would be downwind. As presented, the screening approach only addresses off-site, not on-site exposures.

2. **Page 8-6, Section 8.4.** The final step in the screening assessment must be the summation of risk/hazards for all media.

3. **Page 8-12, Section 8.5.3.** The air evaluation must utilize landfill gas data and data from the landfill surface. In addition, the approach of subtracting upwind concentrations from downwind concentrations may not be appropriate if the prevailing wind speed is not sufficient to prevent migration of contaminants in what was established as the "upwind" direction.

4. **Section 8.5.2, p. 8-12.** A table should be prepared showing the comparison of groundwater COPCs to the California Enclosed Bays and Estuaries human health water quality objectives.

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[1] U.S. Environmental Protection Agency. *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review.* February 1994.

5. **EPA Comment on the ESI Work Plan Not Addressed. Page B2-10, Section 2.1.7.1, Paragraph 1.** Clarify how the number of soil samples, 17, was determined be adequate for the risk evaluation. Also explain how the number of soil background samples, 3, was determined to be adequate to identify background concentrations.

GENERAL COMMENTS ON ECOLOGICAL RISK ASSESSMENT

1. The site description is lacking sufficient detail. Lists of species (mammals, plants, birds, etc) at the site should be included. A map detailing what habitats are at the site should be included. The observations on potentially affected areas and site contamination should be organized by location at the site and/or put on a map.

2. The exposure of receptors to secondary sources through such activities as the ingestion of plants or other invertebrates should be addressed on a receptor specific basis. Modelling of contaminant concentrations is not necessary since this is a screening assessment; however, 100% bioavailability and biotransfer should be assumed for all secondary sources in the screening.

SPECIFIC COMMENTS ON THE ECOLOGICAL RISK ASSESSMENT

1. **Section 8.6, Page 8-14.** The objectives stated for the ecological risk assessment are not the same as those outlined in the work plan document. The risk assessment does not fulfill its original intent as a screening assessment. Inadequate evidence was presented to make any inferences on whether a more comprehensive assessment is needed.

2. **Section 8.6.1, p. 8-14.** The problem formulation should include a discussion on environmental settings and habitats and identification of contaminants and fate and transport potentials (i.e., potential for migration of contaminants at and off the site). This would include a site visit to document the presence or absence of exposure routes, habitat, species, and contamination. Documentation should be made through observations and notes using maps or aerial photographs. The assessment of the risk to the California least tern as shown in the ESI is not sufficient. This section further states that indirect exposure (e.g. food web) was not considered. However, ingestion is the most important exposure pathway for receptors and therefore, food chain impacts must be evaluated.

3. **Section 8.6.2, p. 8-15.** The information presented in the procedures section is unclear. Sections on exposure assessment and effects should be included here. Points to address include the following:

   - Fish, as the major food component for the least tern

should be addressed if surface water and/or sediment adjacent to the site are subject to site-related contamination. Also incidental soil/sediment ingestion should be addressed, as appropriate, as part of the least terns daily diet. Information should be obtained to determine if soil/sediment is needed for daily digestion in the least tern as well. This is common in gallinacous birds such as quail, chickens, etc. and can add significant amounts of contamination to their diets.

- Extrapolation of effects values in screening assessments are presented in the screening assessment and verified or validated in a subsequent phase. Extrapolation of effects values from mammals to birds, as in the ESI, are generally accepted with adequate discussion of uncertainties. Please include a discussion of the uncertainties associated with this method.

- Qualitative assessments of species and/or habitat should be included in a habitat assessment section.

4. **Section 8.6.3, p. 8-17.** The results section is inadequate. The following are specific items which must be addressed:

   - The assessment of hazards to the least tern are incomplete as previously discussed. The identification of contaminants was never discussed or referenced and should include a complete list of all analytes that were detected at the site.

   - Descriptions on the habitat and least tern populations should be included in a habitat assessment section as discussed previously.

5. **Section 8.7, p. 8-19.** The conclusions for the ecological assessment are based on methods not well supported and/or explained, as comments above note. In general, the evaluation performed was appropriate for a screening level assessment, however, verification and validation should follow.

   In addition, human health and ecological risk assessment conclusions are grouped together and tend to confuse one another. When the draft final risk assessments are prepared results of the two should be presented separately.

SECTION 9, SPECIFIC COMMENTS

1. **Section 9.1.3, p. 9-2.** This section was not completed. No realistic evaluation of groundwater impacts to San Diego Bay or Boat Channel were included in this report.

2. **Section 9.1.2.3, p. 9-2.** Discuss the extent of contamination observed in surface soil. Also, discuss the possible sources for the contaminants. For example, PCB-1254 and PCB-1260 were

detected across the least tern area. Was the zone A sand contaminated before it was added to the site?

3. **Section 9.1.3.2, last paragraph, p. 9-4.** The last sentence of the paragraph is misleading since the detection limit for copper and nickel in the ES-3S sample were greater than the water quality criteria. Furthermore, the concentration of copper exceeded the water quality criteria in a sample collected from ES-5S, which is located close to the boat channel. Please discuss these results and explain why the Navy believes that groundwater with concentrations of copper and nickel that exceed water quality criteria will not impact the boat channel. In addition, please discuss how the future groundwater monitoring program will address this issue.

4. **Section 9.1.3.2, Zone B, p. 9-4.** The lack of detectable concentrations of cis-1,2-DCE in wells between ES-3D and SMW-10 is not necessarily evidence that a plume originating in the landfill does not exist. Several *in situ* samples collected in zone B between ES-3D and the Inactive Landfill had detectable concentrations of cis-1,2-DCE and TCE. No deep wells exist southeast of ES-3D towards the landfill. A map with posted *in situ* and monitor well sample results, including locations where contaminants were not detected, for zone B would show this. Therefore, these contaminants may not be isolated and this paragraph should be changed.

5. **Section 9.1.3.2, Paragraph 2, p. 9-5.** This paragraph is misleading since the detection limit for copper and nickel in the ES-3D and ES-4D samples were greater than the water quality criteria. Furthermore, the concentrations of copper and nickel exceeded the water quality criteria in samples collected from the next closest wells to the boat channel (DMW-8 and ES-6D). Change the paragraph to state that groundwater with concentrations of copper and nickel exceeding the water quality criteria may enter the bay.

6. **Section 9.1.4, Paragraph 4, p. 9-5.** If available, the areas with VOC emissions identified during routine monitoring by NTC should be indicated on a map. This would help identify potential problem areas.

7. **Section 9.2, p. 9-5.** Several data gaps still exist and should be discussed in Section 9. A major data gap is the lack of information on the thickness of the landfill. The thickness of fill is only known around the perimeter of the landfill and along the sewer line down the center of the landfill. Fill thickness also influences settlement and gas generation rates.

   According to the Final Work Plan (Section 4.6.3) the base of the artificial fill was identified as a potential migration pathway. The elevation of the base of the landfill will need to be determined to evaluate this migration pathway.

Seasonal variation in groundwater flow patterns was not determined. Groundwater analytical data does not exist for large portions of the interior of the landfill. Groundwater analytical data for the interior of the landfill would help determine the extent of groundwater contaminant plumes, especially on the north end of the landfill, and the extent of leachate generation.

Another data gap is the extent of LFG production. The northern half of the least tern area and the southern half of the Inactive Landfill have not been adequately sampled for LFG.

II. Recommendations for Possible Future work:

- Additional deep wells may need to be installed to determine if a leachate plume and solvents are present in groundwater directly beneath the site. At a minimum, the Navy should determine if there are any deep, regional drinking water aquifers potentially being impacted by downward migration of a possible leachate/solvent plume originating from the landfill.

- Future groundwater samples should be analyzed for a complete suite of ground water quality parameters (both anions and cations) to evaluate the chemical nature and origin of the leachate plume. Field parameters including temp, pH, dissolved oxygen and redox should be measured.

- Additional rounds of water levels in monitor wells should be collected to evaluate seasonal differences in groundwater flow patterns.

- Sampling for LFG should be conducted at several areas on the landfill.

- Groundwater monitoring along the boat channel should continue to confirm that groundwater exceeding water quality standards (for copper and nickel) is not discharging into the boat channel. In addition, a simple water budget should be calculated for the site to estimate recharge-discharge relationships to groundwater and leachate production.

I hope that these comments assist the Navy in improving the ESI document and with subsequent remedy decisions for the inactive landfill at NTC. Should you have any questions about EPA's comments on the Draft ESI, please feel free to contact me at (415) 744-2409.

Sincerely,

Claire Trombadore

Claire Trombadore
Remedial Project Manager

cc: Alice Gimeno, DTSC
Phill Dyck, Navy
Corey Walsh, RWQCB